

## REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 1, 2, 4-15, 17, 19, 21, 23 and 24 are pending in the present application. Claims 3, 16, 18, 20 and 22 are canceled without prejudice, claims 1, 4, 5, 11-13, 15, 17, 19 and 21 are amended and new claims 23 and 24 are added by the present amendment.

### I. Rejection under 35 USC § 102

Claims 1, 2, 15, 17, 19 and 21 were rejected under 35 USC § 102(b) as unpatentable over US Patent Number 5,649,186 to Ferguson. This rejection is respectfully traversed.

Amended independent claim 1 includes similar features to dependent claim 3 (and claim 3 is accordingly canceled), and recites:

the similarity degree among all combinations of two articles are calculated using keywords extracted from the two articles for all articles within a target time period designated by the user, and articles with high similarity degree are formed into one related article group, ... the topicality degree of each related article group is calculated based on a total number of articles and a number of information sources are calculated for each related article group, ... the related article group with the topicality degree exceeding a predetermined threshold value is selected as a key related article group, and ... the typical article is selected for each selected key related article group belonging to the key related article group based on a requirement set by the user,

support for which is found in the originally filed application at least in FIGS. 12 and 13, at page 22, lines 8-15 and page 25, lines 1-7. Independent claims 15, 17, 19 and 21 are amended to include similar features (and dependent claims 16, 18, 20 and 22, which correspond to claim 3, are accordingly canceled).

In a non-limiting example, FIG. 12 shows a target time period is inputted by a user in S11. In S12, related article groups are generated and the similarity degree among all combinations of two articles are calculated for all articles within the inputted target time period. Articles with high degrees of similarity are formed into one related article group. In S13, the topicality degree of each related article group is calculated, and in S14 useful articles are selected from articles with high topicality among the related article groups (see the specification at page 20, line 15 to page 21, line 14).

As an advantage, useful articles can be selected from news information and the user can efficiently obtain the useful articles (see the specification at page 12, lines 20-25).

In contrast, as acknowledged in item 7 at page 4 of the outstanding Office Action, Ferguson does not disclose a method in which categories are selected based on topicality degree of a category.

Further, Krellenstein at col. 5, lines 4-41 only discusses selecting several candidate categories based on common characteristics of similarities of records in a search result, which is different from forming "articles with high similarity degree ... into one related article group," as recited in the amended independent claims.

Moreover, Krellenstein does not discuss or suggest calculating a "topicality degree of each related article group ... based on a total number of articles and a number of information sources are calculated for each related article group," as recited in the amended independent claims. Krellenstein also does not suggest calculating a "similarity degree among all combinations of two articles ... using keywords extracted from the two articles for all articles within a target time period designated by the user," as in the amended independent claims.

Accordingly, it is respectfully submitted amended independent claims 1, 15, 17, 19, and 21 and each of the claims depending therefrom, patentably distinguish over Ferguson.

## **II. Rejections under 35 USC § 103**

Claims 3-7, 11-14, 16, 18, 20 and 22 were rejected under 35 USC § 103(a) as unpatentable over Ferguson and US Patent Number 5,924,090 to Krellenstein. This rejection is respectfully traversed.

Pending claims 2, 4-7 and 11-14 depend on amended independent claim 1, which as discussed is believed to patentably distinguish over Ferguson and Krellenstein.

Moreover, dependent claims 2, 4-7 and 11-14 further distinguish over Ferguson and Krellenstein. In a non-limiting example, claim 7 recites displaying "typical articles selected from the groups in an order corresponding to topicality degree of a group." As an advantage, the user can ascertain the most topical groups based on the articles displayed in order. As discussed, it is respectfully submitted Ferguson and Krellenstein do not discuss or suggest a topicality degree, as recited in claim 7. Similarly, the other dependent claims also recite distinguishing features.

Accordingly, it is respectfully submitted dependent claims 2, 4-7 and 11-14 further patentably distinguish over Ferguson and Krellenstein.

Claims 8-10 were rejected under 35 USC § 103(a) as unpatentable over Ferguson, Krellenstein and US Patent Number 6,460,036 to Herz. This rejection is respectfully traversed.

Claims 8-10 depend on amended independent claim 1, which as discussed is believed to patentably distinguish over Ferguson and Krellenstein. Further, Herz only discusses a “target profile” for each of several users, but does not discuss or suggest at least calculating a topicality degree, as recited in amended independent claim 1 from which claims 8-10 depend.

Accordingly, it is respectfully submitted claims 8-10 patentably distinguish over Ferguson, Krellenstein and Herz.

### III. New Claims

In addition, new claims 23 and 24 are added to set forth the invention in a varying scope. New claim 23 includes similar features to claim 3 written in independent form, and further recites “the similarity degree  $S$  between two articles  $A_1$  and  $A_2$  is calculated according

to:  $S = \frac{\sum_{i,j} S_{ij}}{\min\{n(A_1), n(A_2)\}}$ , wherein  $S_{ij} = \frac{|W_{ij}|}{\min(|W_i|, |W_j|)}$ ,” support for which is found in the

originally filed application at least in FIG. 5 and at page 22, lines 8-15. Also, new claim 24 depends on new claim 23, and further recites “the degree of topicality  $T$  is calculated according

to:  $T = mn^2 \times \sqrt{\prod_{i=1}^n \frac{m_i}{m}}$ ,” support for which is found in the originally filed application at least in

FIG. 16 and at page 25, lines 1-7.

It is respectfully submitted Ferguson, Krellenstein and Herz do not discuss or suggest such features.

### IV. Amendments to the Drawings

FIGS. 9, 10, 25 and 26 are amended only to correct minor informalities. It is believed no new matter is added.

**V. Conclusion**

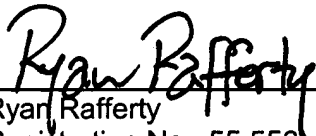
Consequently, in light of the above discussion and in view of the present amendment, this application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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By:   
Ryan Rafferty  
Registration No. 55,556

1201 New York Avenue, NW, Suite 700  
Washington, D.C. 20005  
Telephone: (202) 434-1500  
Facsimile: (202) 434-1501